

Claims In The Subject Application

Claims 1-2 and 13-16 are presently in the application; the independent claims being claims 1 and 2.

Amendments To The Claims

Claim 1 : Currently amended
Claim 2 : Currently amended
Claims 3 and 4 : Cancelled
Claims 5 - 12 : Withdrawn
Claims 13 - 16 : Newly added

Text of Pending Claims

1. (Amended) Apparatus to assist in pressure filling propellant into a bag-on-valve aerosol valve system having a container, said propellant to be filled into the interior container space outside the bag, comprising an aerosol valve having a valve stem, a valve stem gasket, a valve housing and a bag mounted on said valve housing[, and]; wherein the valve stem has an intermediate portion with an exterior frusto-conical annular surface and the valve housing has an interior frusto-conical annular surface, said respective frusto-conical annular surfaces engaging in annular sealing contact with each other when the stem is deeply depressed for propellant pressure filling, thereby preventing access of the propellant into the bag[.]; wherein said valve stem acts as a single integral member; wherein said respective frusto-conical annular surfaces are separated from one another when the aerosol valve is not actuated and only engage each other during propellant pressure filling; and wherein said valve housing is characterized by the absence of a propellant filling orifice through the housing side wall axially below the valve stem gasket.

2. (Amended) Apparatus to assist in pressure filing propellant into a bag-on-valve aerosol valve system having a bag in a container, said propellant to be filled into the interior container space outside the bag, comprising an aerosol valve having a valve stem, valve housing and a gasket mounted into a mounting

cup, said gasket surrounding the valve stem and having a top surface abutting a bottom surface of the mounting cup when the valve is closed; said valve stem having a central dispensing channel for product dispensing and one or more lateral orifices extending through the valve stem side wall into said channel; said bag sealingly attached to said valve housing; said valve stem having a portion with an exterior annular surface and said valve housing having an interior annular surface, said respective annular surfaces engaging in annular sealing contact with each other when the stem is deeply depressed for propellant pressure filling between said gasket top surface and said mounting cup bottom surface and around the outside of the gasket, thereby preventing access of the propellant into the bag[.]; wherein said valve housing is characterized by the absence of a propellant filling orifice through the housing side wall axially below the valve stem sealing gasket.

3. (Cancelled) The apparatus of claim 2, wherein said stem exterior annular surface and said housing interior annular surface are both frusto-conical.

4. (Cancelled) The apparatus of claim 3, when said stem exterior annular surface is positioned at an intermediate position of the stem.

5. (Withdrawn) Apparatus for pressure filling product into a bag-on-valve aerosol valve system, said product to be filled into the bag sealingly mounted to the valve, and said valve having a valve stem with an indent in its exterior surface, comprising a product filling head insert member having at least one spring-loaded slide, said spring-loaded slide extendable into said stem indent to establish a precise degree of stem depression for product filling upon insertion of the stem into the insert member.

6. (Withdrawn) The apparatus of claim 5, comprising at least two spring-loaded slides spaced an angular distance from each other.

7. (Withdrawn) The apparatus of claim 6, wherein said spring-loaded slides are biased radially inwardly towards said valve stem insertable position in an interference relation, are movable radially outwardly when said stem is initially inserted into said insert member, and are movable inwardly under spring-bias into said stem indent when said stem is further inserted into said insert member.

8. (Withdrawn) The apparatus of claim 6, wherein said stem indent is annular and said spring-loaded slides have curvilinear inner faces for extending into said annular stem indent.

9. (Withdrawn) The apparatus of claim 5 or claim 6, wherein said aerosol valve has a valve housing, and wherein the valve stem has a portion with an outer annular surface and the valve housing has an interior annular surface, said respective annular surfaces engaging in annular sealing contact with each other during propellant pressure filling of the bag-on-valve aerosol valve system but not engaging in annular sealing contact with each other during product pressure filling into the bag.

10. (Withdrawn) A method of pressure filling propellant and product into a bag-on-valve aerosol valve system in a container, wherein the bag is sealingly mounted to the valve and the valve is fixed to the container prior to filling, said valve including a valve stem, sealing gasket and valve housing, comprising depressing and maintaining said valve stem at a first predetermined position to block access to said bag through the valve housing during propellant pressure filling, pressure filling propellant along said stem and over said gasket down into the interior container space outside the bag, depressing and maintaining said valve stem at a second predetermined position for product filling, and pressure filling product through the valve housing into the bag, said first stem predetermined position resulting from more stem depression and said second stem predetermined position resulting from less stem depression.

11. (Withdrawn) The method of claim 10, wherein the propellant is filled into the aerosol valve system before the product is filled.

12. (Withdrawn) The method of claim 10, wherein the product is filled into the aerosol valve system before the propellant is filled.

13. (Newly Added) The apparatus of claim 1, said valve stem exterior frusto-conical annular surface engaging said valve housing interior frusto-conical annular surface at a position substantially separated from the bottom of the valve stem.

14. (Newly Added) The invention of claim 2, wherein said valve stem acts as a single integral member; and wherein said respective annular surfaces are separated from one another when the aerosol valve is not actuated and only engage each other during propellant pressure filling.

15. (Newly Added) The apparatus of claim 2, wherein said respective annular surfaces engaging in annular sealing contact with each other, engage at a position substantially separated from the bottom of the valve stem.

16. (Newly Added) The apparatus of claim 2, wherein said stem exterior annular surface and said housing interior annular surface are both frusto-conical.